COMMENTS AND RECOMMENDATIONS

SUBMITTED TO THE

COUNCIL OF THE LOYOLA FACULTY OF ARTS AND SCIENCE

ON

THE FUTURE OF SCIENCE AT CONCORDIA

September 29, 1976

INTRODUCTION

Faculty Council would like to express its appreciation for Professor Bordan's Report. It has clarified and simplified complex issues, and it serves to focus attention rightly upon those data and values which should base the University's decision concerning the future of Science.

What follows is a critique of the Report - a critique which Faculty Council believes brings the discussion further down the road, but which pursues the same line of thought laid out by Professor Bordan.

At the outset, we must point out two omissions which flaw the general orientation and method of the Bordan Report and its recommendations: first, they fail to deal with the question of where geographically the University intends to place its major thrust, especially in the Arts and Science, for the next two decades; second, they tackle the problem of the future of Science while ignoring the problem of the Humanities and Social Sciences, as though one could decide the one without implicitly determining much about the future of the others.

The Council of Universities states clearly Concordia's mission:

> "Concordia a donc une place très nette dans le réseau des établissements d'enseignement supérieur québécois dans la mesure où ses principales activités sont conformes à sa mission: ouverture aux étudiants à temps partiel, importance relative du premier cycle, activités des 2e et 3e cycles en complémentarité avec McGill, innovation pédagogique." (p. 285)

The Council's chapter on Concordia also makes it clear that the University is to serve the Anglophone population of Montreal. It is consequently

imperative to examine how stable these characteristics will be in the future prior to making recommendations with long term implications for the future of Science at Concordia. Indeed, any premature decision on the future of Science would severely compromise, if not render impossible, serious decisions which Concordia must take concerning its future in the light of this examination.

The Loyola Faculty of Arts and Science, in a paper tabled at its Faculty Council meeting of May 13, 1976, singled out several critical elements which it felt must be examined in charting the future course and ultimate destination of the University. It would be useful to review some of these elements.

In a survey released recently, dated June 23, 1976, the School Council of the Island of Montreal presented a "Forecast of the School Population of the Island of Montreal for 1980 and 1985".

	Francophone Sector	Decrease	%	Anglophone Sector	Decrease	%
1975	194,187			137,058		
1980	144,150			110,125		
1985	114,150	80,037	41%	89,850	47,208	34%

Between 1975 and 1985, the Francophone sector will decrease by 41%, and the Anglophone sector by 34%. The relative yearly application of Bill 22 is considered "more or less" by the demographer. In effect, a more severe application of Bill 22, as was the case for this academic year, would mean even less enrolment in the English sector. Consequently, Concordia's main source of student clientele will decrease radically in

the next decade.

There is concern, moreover, that Concordia will soon be asked by CLESEC to state clearly its admissions procedures. This can only be interpreted as a step taken by the CEGEPs to keep to themselves all "non-university" students. Confined to accepting only bona fide university students (90 credits to completion of degree), Concordia would lose its ECP and MSQP student population.

The Council of Universities does not recognize Concordia as a University catering to students from abroad; rather, it is McGill which is the Anglophone University in Quebec with an international reputation. Consequently, limitations on foreign student enrolment imposed by the province, would again have severe repercussions for Concordia's enrolment.

Finally, there is a growing threat to Concordia's part-time student enrolment. To believe that Concordia would be successful in preventing McGill from continuing to increase its courses and programme offerings in the late afternoon and early evening for the benefit of the part-time students in the Montreal area is as unrealistic as it is undesirable. McGill University has expanded its role in this area and there is no indication that this expansion will be limited. In addition, several Anglophone CEGEPs in the Montreal area are offering courses for credit specifically intended for the part-time student.

In the light of these facts, it is necessary for us to answer the following questions prior to making any major decision on the location and research activity of individual departments of our Science component: How will Concordia best serve the Anglophone community in Montreal?

Where, geographically, can Concordia best serve this same community, especially in Arts and Science, for the next fifteen years?

To deal with the future of Science within the University without taking into consideration the immediate implications for the future of Arts is unrealistic. Indeed, it is impossible to talk about the future of Science without considering immediately the consequences for Arts. If, on the one hand, the University should opt for a single Faculty of Science then several important results occur:

- a new Faculty of Arts will be created on the Loyola Campus - a new structure based on departmental parity principle would have to be devised for the graduate activity of professors from the Sir George Williams Faculty of Arts and the Loyola Faculty of Arts. The merger document would have been so changed as to make meaningless and void any agreement contained therein regarding graduate activity in the Humanities and the Social Sciences.
- it would be an interesting debate in logic to present the arguments which would defend as necessary the fusion of departments such as Geology and Mathematics while defending the advisability of separate departments in Philosophy and Psychology.
- the University would have to create a Faculty of Interdisciplinary Studies with budget and powers adequate to foster this important aspect of current education.
- a structure, with credibility, would have to be created which would ensure an equitable establishment of priorities especially in an institution with separate Faculties containing independent departments

of the same discipline.

- a mechanism would have to be found which would contribute to the development of a "Condordia spirit or mentality" in the professors of the two Arts Faculties as the student population begins to decline.

Should, on the other hand, the University opt for all of Science within the Loyola Faculty of Arts and Science, then the following questions would have to be answered. How could the University logically live with a Sir George Williams Faculty of Arts and a "Loyola Faculty of Arts and University Science"? If the University were to choose this option because it believes a combined Faculty of Arts and Science can help Concordia play a unique role in undergraduate education for the Anglophone community of Montreal, then what justification would there be for a separate Sir George Williams Faculty of Arts? How would priorities be set and established in Arts, where both Sir George Williams Faculty of Arts and a "Loyola Faculty of Arts and University Science" exist?

The Loyola Faculty of Arts and Science proposes that, in the light of the factors which will affect Concordia's student enrolment in the next decade and in the light of the Council's unequivocal affirmation that Concordia's mission is to serve the Anglophone community of Montreal, the geographical thrust of the University, especially for Arts and Science, be toward the West end of the City, while maintaining the necessary operation on the downtown Campus. Moreover, in order to respond to the Council's criterion of "innovation pedagogique", the Loyola Faculty of Arts and Science believes that a combined University Faculty of Arts and Science is the vehicle most conducive to this end, especially during a prolonged period of student population contraction. This position was

presented by the Dean to the Academic Vice-Rector during his search for input last Spring.

Because Professor Bordan had only been given the mandate to concern himself with the future of Science, his Report presents us with only two alternatives. If the choice is narrowed to these alternatives, then the Loyola Faculty of Arts and Science recommends that the responsibility for all University Science be given, in the interim, to the Loyola Faculty, appropriately reconstituted, and that a combined University Faculty of Arts and Science be created eventually for Concordia University.

We shall now deal with the specific recommendations in the Bordan Report. Our observations as well as our recommendations must be interpreted within the context of what we have written in the previous paragraphs.

THE BORDAN REPORT

A) Section 2 of the Bordan Report refers to Opération Sciences Fondamentales, which recommends that the present duplicate Science Departments in the University be merged. However, it must also be pointed out that the O.S.F. gives Concordia full freedom to choose its own faculty structure for Science.

> "Nous insistons, toutefois sur le fait que l'O.S.F. ne veut pas s'intéresser aux structures administratives, mais qu'elle a pour but d'assurer le regroupement des ressources et d'éviter qu'il y ait dédoublement des cours et autres activités pédagogiques sauf dans les cas qui se présentent normalement dans toute institution universitaire."

B) Section 4 of the Bordan Report deals with "Enrolment in Science." It is evident that the University will experience a decline in student enrolment in Science and other Faculties in the next fifteen years. This is a factor which the University must weigh carefully before making any decisions concerning the future of Science. It must examine, in the light of this forecast, the characteristics of its student population in Science. Unfortunately, the table on page 4 of the Bordan Report does not make any mention of this. Concordia has been given the responsibility of providing undergraduate education for the Anglophone community in Montreal and for providing educational services to the part-time students of this same population. Consequently, an examination of the characteristics of Concordia's Science student population would be of immense value in helping the University decide where it should invest its future

geographically. If each campus clearly appeals to a specific type of Science student, both on the undergraduate and graduate level, the University must therefore continue to foster this appeal.

It is consequently imperative to provide answers to the following questions:

What type of student (v.g. part or full-time, Major or Honours, Terminal or Graduate stream, single or double Majors, etc.) chooses to study Science at the Sir George Campus? What type of student chooses to study Science at the Loyola Campus?

How many full-time and part-time students in Science are there on the respective campuses? What percentage of the students in Science on the respective campuses come from the local CEGEPs? What percentage of the students in Science on the respective campuses, enrolled in the undergraduate programmes, choose to pursue graduate studies? What is the future source of Science students going to be for the respective campuses? What percent of the equivalent course enrolments in each of our Science Departments are in courses which should be considered pre-university? What role will McGill play in attracting Science students from our Anglophone CEGEPs in the Montreal area in the future?

C) Section 5 of the Bordan Report deals with "Organizational considerations at the Departmental level."

In suggesting a method of choosing new Chairmen for the fused

Science Departments, the Bordan Report makes no mention of the Deans. Surely the experience of these Deans could certainly be put to good use in the process of unification. It is recommended, therefore, that Recommendations 2, 3, 4 be revised as follows:

Rec.: That for each Department so established a Search Committee be struck, to recommend on the appointment of a Chairman for a term of three years.

Rec.: That for this occasion, each Search Committee be constituted as follows:

a) the Dean of the Sir George Williams Faculty of Science;

b) the Dean of the Loyola Faculty of Arts and Science;

c) two full-time faculty members of the Sir George Williams Faculty of Science from outside the Department, to be elected by the full-time faculty of the department concerned;

d) two full-time faculty members of the Loyola Faculty of Arts and Science from outside the Department, to be elected by the full-time faculty of the department concerned;

e) one student from each Department's student association;

f) the Chairman of the Search Committee is to be elected from among the members and by the members of each Committee.

Rec.: That the Search Committee recommend to the Vice-Rector Academic on the appointment of the Department Chairman, after due consultation with each member of these same departments.

D) Section 6 of the Bordan Report deals with "the Ph.D. in Physics and Chemistry." The final O.S.F. Report recommends that both Ph.D. programmes in Physics and Chemistry be abandoned. Recommendation 5 of the Bordan Report supports the O.S.F. statement concerning Physics whereas Recommendation 6 calls for the retention of the Ph.D. programme in Chemistry. There seems to be no obvious reason for such divergent recommendations, despite the statement that "the situation in Chemistry differs sufficiently from that in Physics to justify a serious attempt to maintain the Ph.D. programme in that discipline...". For example, the student enrolment in the respective doctoral programmes, as illustrated in Appendix E-3, is very similar. Between 1970/71 and 1974/75, there were 43 enrolments in the doctoral programme in Chemistry and 6 degrees were granted, while in Physics there were 34 enrolments with 2 degrees granted. Moreover, between 1972/73 and 1974/75, an equal number of students (28) enrolled in the doctoral programmes in Chemistry and Physics.

Appendix B illustrates the Research Funding for Concordia Science

in 1975/76. It breaks down as follows for Chemistry and Physics:

	S.G.W. Campus		Loyola Campus	
	Chemistry	Physics	Chemistry	Physics
NRC	$26,835	$28,950	$5,705	-
Internal (FCAC	2,031	-	-	-
Internal (NRC	7,665	-	200	-
Internal (CASA	777	-	-	200
Other - Federal Government	-	-	12,000	-
Industries	5,500		-	-
	$ 42,808	$ 28,950	$ 17,905	$ 200

The Concordia total for Chemistry is $ 60,713 and for Physics, it is $ 29,150. It can be questioned whether or not $ 30,000 is indeed a significant difference, since 1/3 of this amount comes from funds which have been allocated internally. In effect, the situations in Chemistry and Physics do not appear so disparate as to warrant different recommendations. Consequently, it is recommended that Recommendations 5 & 6 be replaced by the following:

Rec.: That no decision be taken concerning the Ph.D. programmes in Chemistry and Physics until the new Faculty Council has been consulted.

E) Section 7 of the Bordan Report deals with "Space Considerations." It is evident that the statistics on Space have been and will continue to be a focal point of discussion. The norms quoted, as applied by the University Planning Department, shall be examined shortly. To state, however, that the norms quoted bear witness to "the experience of students,

faculty members and staff..." of some Faculties and not of others, is not accurate. To state moreover that the Loyola Faculty of Arts and Science has never maintained that it needs more space than it now has, is to ignore the Space request submitted by the Dean of the Loyola Faculty of Arts and Science to Professor J. H. Whitelaw in December 1975. Indeed, the experience and present living conditions of students, faculty and staff in the Departments of Bio-Physical Education, Communication Arts and Psychology in the Loyola Faculty of Arts and Science are vivid testimony to the need for more space in the Loyola Faculty of Arts and Science.

A study of space utilization within the Loyola Faculty of Arts and Science reveals a serious discrepancy between present figures and those released in the Report. It could be that the statistics cited related to the 1974/75 academic year, when space norms were first calculated on the Loyola Campus. Nevertheless our study, using government statistics, government data, and government definitions, based on 1975/76 square footage reveals that the Loyola Faculty of Arts and Science is actually 22,200 square feet, or 19% under the norms (see Appenidix A). It is useful to compare the statistics of the Bordan Report with those recently calculated for the Loyola Faculty of Arts and Science:

Bordan Report	Sq. ft. Actual	Sq. ft. Norms	% Over (Under) Norms
Academic Space			
Loyola Science	50,700	36,000	40.8
Loyola Arts & Science	96,000	74,500	28.8

Revised Study:	Sq. ft. Actual 1975/76	Sq. ft. Norms	% Over (Under) Norms
Academic Space			
Loyola Science	52,500	56,000	(6.2)
Loyola Arts & Science	94,650	116,000	(19.0)

It would appear that these revised figures for 1975/76 will have definite repercussions on the recommendations concerning space considerations, especially, if, as it is stated; "... for better or for worse the norms cannot be ignored."

Unfortunately, we cannot report on the 1975/76 space allocation and deficiencies in the Sir George Williams Faculty of Science as these figures were not available to us.

However, to use space considerations as the sole basis for determining the ultimate location of research and graduate programmes is to ignore several important factors.

Research is currently being conducted by several faculty members of the Science component at the Loyola Campus. Graduate students from McGill are doing work under the guidance of faculty on the Loyola Campus. An arbitrary decision to concentrate research on one or other campus would limit the University's flexibility and productivity in this sphere. It would be unreasonable to ask a faculty member to do his research on one campus and to teach on the other. In addition, it is evident that it would be extremely difficult to persuade a professor to be interested in teaching on a campus where research facilities could not exist by arbitrary University legislation.

It becomes evident that a certain degree of flexibility must be maintained in research concentration at Concordia - all the more so, if in light of a thorough study, Concordia decides to invest its future geographically especially in the Arts & Science in the west end of the city. Consequently, it is recommended to revise Recommendations 7 and

8 to read as follows:

Rec.: That the question of space be reconsidered in the light of the most recent data on space available for the Loyola Faculty of Arts and Science and the Sir George Williams Faculty of Science.

Rec.: That the future of research and graduate programmes only be determined after the University has decided where it intends to invest its future thrust geographically and subsequent to consultation with the new Faculty Council.

F) Section 8 of the Bordan Report deals with "Computer Science." The situation concerning Computer Science is, on the whole, reflected clearly in the Report. It is evident, however, that the continuing prominence of computer use within and without academia is stimulating students from all disciplines to become familiar with at least the basic rudiments of computer operations and uses. Consequently, it is recommended to replace Recommendation 14 with the following:

Rec.: That the Computer Science Committee at Concordia guarantee the implementation of significant minor programmes and elective courses in Computer Science for students in the Faculty of Arts and Science on the Loyola Campus.

G) Section 9 of the Bordan Report deals with "The Faculty Level." The historical context of Arts and Science at Loyola as related in the

Report calls for clarification.

In 1942, Loyola College introduced a Science programme of studies; a separate Faculty structure per se was not created. Between 1958-1961, one Dean of Studies was responsible for all the programmes of Studies offered at Loyola College. Between 1961-1967, there was a Dean of Academic Studies and a Director of the Evening Division. It was only in 1968 that Loyola College created separate Faculties of Arts and Science along with those in Commerce and Engineering. An Academic Vice-President was also named at this time as Loyola reacted to the tremendous growth in its student population by creating these new administrative structures. In essence, separate Faculties of Arts and Science were a short-lived five-year experience on the Campus. And even then, the existence of separate structures did not extend as far as one might imagine. Though Faculty Councils did exist, they were more of a mechanism for assembling full-time faculty for general discussion than anything else; they had no legislative authority over matters such as curriculum, which is the very substance of a Faculty Council. Discussions of, and decisions about curriculum took place primarily in the Loyola Senate; Departments submitted curricular matters directly to this same Senate through Committees, whose composition reflected the components of the entire academic structure, including Arts and Science. Consequently, this heterogeneous Senate took all major questions under consideration and was responsible for major decisions; it was a mirror of the academic community of Loyola and de facto continued in the Liberal Arts tradition of Loyola College. Therefore, though separate Faculties (with separate Deans) existed administratively since 1968, Loyola

pursued its deeply rooted academic traditions through its Senate.

The Bordan Report examines the possibility of a University Faculty of Science and of a Loyola Faculty of Arts and Science responsible for all University Science. The Rector reacted to these recommendations in his memo of August 18, 1976. It might be useful at this point to attempt to list the major points made by Professor Bordan and the reaction of the Rector:

Bordan: "...Loyola Arts and Science, as a Faculty, has not been in existence long enough to have produced program evidence of 'Arts and Science' as a concept, a philosophy, different from that which might exist in separate Arts and Science Faculties."

"...Science can surely exist, and prosper, whether as a separate Faculty or as a set of Departments within a Faculty of Arts and Science...."

"Faculty boundaries thus do not appear, a priori, to set up boundaries to student choice or to innovation."

"It is unlikely that students see a Faculty structure as particularly relevant; what concerns them is that programs exist to satisfy their needs and interests..."

"Loyola Arts and Science has not been heavily engaged in Science research, nor has it had the responsibility for managing graduate programs. Can it be given the organizational structure necessary to assume these important functions?"

The Rector:

A University Faculty of Science

"...is the easier of the alternatives to visualize: it corresponds to the form of Faculty organization most common in universities, and it would parallel the University Faculties already existing at Concordia."

"Those who support the concept of a single Science Faculty face a particular challenge: to prove that it can effectively foster and develop interdisciplinary activities."

The Rector:

> "...The applied approach to strictly science programmes must be pursued just as actively; the base of traditional theoretical programmes must be maintained; graduate programmes, particularly at the master's level, must receive proper attention; a research policy which supports and strengthens the teaching activities must be developed and implemented; the OSF recommendations on teacher training must be acted upon."
>
> "...a University Faculty of Science would be less disruptive of existing habits on both campuses."
>
> A Faculty of Loyola Arts and University Science
>
> "... the new Faculty would have an extraordinary opportunity to create a Faculty of Arts and Science based on a genuinely equal partnership. The relevance of this to interdisciplinary development is evident - equal partners should be best able to exploit the advantages of this approach to curriculum."
>
> "...Professor Bordan...draws attention to the OSF comment that no university has identified itself as seeking above all an undergraduate programme of the highest quality. ...the affinity between two units whose graduate openings are restricted may well encourage them to take up this challenge with particular effect."
>
> "The Faculty must find an organizational form that will reflect the equal partnership between Arts and Science."
>
> "Those who support the concept of Arts and Science face this major challenge: to propose structures that will provide for balanced development of the Faculty based on a true partnership."
>
> "The new Faculty would find that much of its energies in its early years must be devoted to its Science responsibilities....a certain forebearance on the part of the Arts members of the Faculty would be necessary until urgent Science matters were dealt with....Moreover, since the present Loyola Faculty of Arts and Science has little experience in administering graduate work and research, some rapid reorganization would be necessary to fill this gap."

In essence, both Professor Bordan and the Rector see a Faculty of Arts and Science as something which can provide innovation and

inventiveness; their reticence is due to a certain degree of conservatism - a Faculty of Science, to quote the Rector, "...represents the tried and safe approach."

In reply, there are certain affirmations which need clarification. As we expressed in our historical report previously, the Loyola Faculty of Arts and Science has not been in existence for the past eighteen months alone. The concept of Arts and Science as an integral unit in one's education is a philosophy which has existed at Loyola these last twenty-five years. It is this concept which fostered the "interdisciplinary" approach to undergraduate education: strong disciplines, based on strong departments to provide a sound undergraduate education.

Secondly, it must be made clear that the Loyola Faculty does show significant programme differences which are due to its philosophy. Up to the merger with S.G.W. all Commerce students and Science students were required to take one third of their courses outside Commerce and Science respectively. This tradition has partially given way because of the fusion of Commerce Faculties on the one hand, because of the recent introduction of Bac Spécialisé in our curricular planning, and most particularly under the pressure of the O.S.F. Report and the pressure to line up our Science programmes with those of Sir George. We consider the loss here to be serious. We have attempted to make up for it by the introduction of "significant Minors" in many disciplines. Moreover we have developed an extremely rich offering of interdisciplinary programmes. The development and implementation of one very successful recent programme, Recreation and Leisure Studies, was made easier when

Arts and Science were once again united in one Faculty.

Thirdly, the interdisciplinary bias of the Loyola Faculty has not precluded development of applied or socially involved programmes. The following come immediately to mind: Health Education, Library Science, Recreation and Leisure Studies, Communication Arts, Bio-Chemistry, Bio-Physical Education.

Fourthly, there appears to be a completely erroneous belief that pure Science is better assured in a separate Faculty of Science. Though Science exists as a separate Faculty in a majority of Canadian Universities, as illustrated in Appendix H of Professor Bordan's Report, it is wrong to conclude that it is a structure common to most universities, in the North American context. Indeed, a recent National Science Foundation Report published in the United States listed the first ten universities with the highest total research expenditures in Science for the fiscal year 1975. Here is a list of those universities, with their faculty structure and the amount of money expended.

University	Millions	Faculty Structure
Un. of Wisconsin at Madison	$ 94.5	College of Letters and Science
M.I.T.	84.7	(School of Humanities, Social Sciences, (separate School of Sciences
Un. of California at San Diego	76.9	(2 Colleges offer B.A. (2 Colleges offer B.A. & B.Sc.
Michigan	74.6	College of Literature, Science and the Arts
Minnesota	69.7	Institute of Technology, College of Biological Sciences, College of Liberal Arts
Columbia	68.2	School of Arts and Science
Stanford	66.9	School of Humanities and Sciences
Un. of Washington	66.0	College of Arts and Sciences
" of Calif.at Berkeley	65.1	College of Letters and Science
Harvard	64.2	Faculty of Arts and Science
	$ 730.8	

In these Universities, the fact that Science is housed in a University Faculty of Arts and Science has certainly not hindered the academic stimulation and productivity of the Science component.

Moreover, on examining internally the arguments for and against either of the options, one critical question must be asked:

> What has the single Faculty and combined Faculty structure done for the respective Science operations within Concordia's two components over the past 10 years? Has one of the structures provided tangible evidence of major achievements, and if so, to what extent?

These alternative Faculty structures must be examined in the light of the perimeter within which each has existed before any decision can be taken as to the future of Science within Concordia.

It is interesting to note that where a combined Faculty structure has been actually experienced within Concordia, it has met with the overwhelming approval and confidence of those involved. The results of a questionnaire distributed to the full-time faculty members of the Loyola Faculty of Arts and Science indicate that 90% of those who responded prefer a combined Faculty structure, whereas 10% prefer a separate one. Within the Loyola Science component alone, 86% prefer an Arts and Science Faculty.

The recent Report of the Council of Universities commented not only on the mission of Concordia University, but also on its orientations, axes of development, priorities and "secteurs modèles." The Council's own definition of these terms can be found in Appendix B. In the section

on orientations, the Council makes a specific reference to Arts and Science at Concordia:

> "...l'Université Concordia n'a pas d'axes de développement importants dans son vaste secteur des arts et sciences. Le Conseil ne s'attend pas à ce que chaque institution apporte nécessairement une contribution insigne au réseau dans tous ses secteurs d'activités; il s'étonne seulement de ce que la majeure partie des ressources de Concordia soit hors de ses axes de développement. Pour les besoins de sa planification interne tout au moins, il serait souhaitable que Concordia indentifie les quelques domaines du vaste secteur des arts et sciences qu'elle entend développer plus particulièrement."
>
> (p. 287)

This statement invites Concordia University to do something in the area of Arts and Science which would give this institution a specific and clear orientation. The extension of a combined Faculty of Arts and Science to the whole University would be a clear step in this direction. It would immediately differentiate Concordia from McGill in this sector. If, in addition to offering strong traditional and theoretical programmes at the undergraduate level, as is already the case, this combined Faculty could continue the Loyola tradition of "strong disciplines and strong departments leading to a sound undergraduate education," Concordia could offer an attractive and viable alternative to the Anglophone undergraduate student in Quebec who is interested in Science. Though it may be true that students pay no particular attention a a Faculty structure but are rather interested in finding programmes and orientations which respond to their needs, it is also true that multiple Faculties tend to create administrative barriers which reduce the possibilities of innovation and inventiveness which lead to the loss and confusion of priorities. (cf Appendix C). Indeed, the combined Faculty structure Loyola has both maintained the traditional theoretical programme and produced Applied Science

programmes responding to the needs of the community at large. Such flexibility would become impossible if separate Science and Arts Faculties were created.

Placing all of Science within the Loyola Faculty of Arts and Science would create certain challenges. However, these challenges can be met at the administrative level if a proper and judicious use is made of the talents and experience belonging to those who have been involved in graduate and research activity.

Concerning the question of parity at the Council level, the challenge could be met by molding previous Loyola and Sir George Williams traditions to form something which would be distinctly Concordian. For example, the Loyola Faculty of Arts and Science has one elected representative from each of its Departments at the Council level, whereas in Sir George Williams Science, the Chairmen of the Departments sit ex officio along with the elected representative. A Loyola Faculty of Arts and University Science could have the following Council structure which would reflect the desired parity between Arts and Science:

a) the Chairman, ex officio, from each of the six Science Departments;
b) six Science faculty members elected by the professors at large;
c) one elected representative from each of the twelve Arts Departments.

Though student representation on Loyola Arts and Science Faculty Council is presently weighted towards Arts, parity representation from both Arts and Science students would be integrated into the new Faculty Council.

There is no question that the applied approach to Science programmes could be pursued actively in a combined Faculty structure; so too would the base of traditional theoretical programmes be maintained. Indeed, the Science components within the Loyola Faculty of Arts and Science are operative in both of these areas and there is no evidence that their presence in a combined Faculty structure has in any way compromised or hampered these orientations. Moreover, as stated previously, a judicious use of the talents and experience of those involved in graduate and research activity would be integrated into a combined Faculty structure.

Finally, though it is true the O.S.F. recommendations on Teacher-Training must be acted upon, it must be kept in mind that the O.S.F. recommendation mandate is limited:

> "Que le Ministère de l'Education prenne les mesures requises pour que le perfectionnement des professeurs de sciences au secondaire soit complété au cours des dix prochaines années." (p. 248)

It is our feeling that a combined Faculty of Arts and Science can fulfill this mandate which is probably destined to expire ten years from now.

Briefly, it is evident that of the two options, a Faculty of Arts and Science provides both the professors and students with several challenges which must be met. Given the statement of the Council of Universities on Concordia Arts and Science, the creation of a combined Faculty of Arts and Science, in the present circumstances, would enable Concordia to present a unique and different alternative for the Anglophone student in Montreal, and provide the structure which would facilitate the development of new programmes for the community we are expected to serve. We propose that the Loyola Faculty of Arts and Science be given

the responsibility for University Science, in the interim, and that a combined Faculty of Arts and Science be created for Concordia University. The opportunity at hand will never come again. If Concordia fails to take full advantage of this situation, the results could be nothing short of disastrous for the University, and for the community we serve. Indeed, even if, in the developing situation, a combined Faculty of Arts and Science proves in future to be inappropriate, it would still be possible for the University later to revert to separate Faculties. If, on the other hand, separate Faculties of Arts and of Science are established immediately, it is less than likely that a combined Faculty of Arts and Science could ever come into being at Concordia. Consequently, it is recommended that Recommendations 16a, b and 17a, b, be revised to read as follows:

> Rec.: That the Loyola Faculty of Arts and Science, consisting of the current Loyola Departments in Arts and Bio-Physical Education, and of the University Departments in Biology, Chemistry, Geology, Mathematics and Physics, be given the responsibility for Science on both campuses.

H) Section 10 of the Bordan Report deals with excellence in undergraduate Science. The statements made by Professor Bordan are irrefutable here. The University does have a challenge to face, and that is to provide excellent teaching on the undergraduate level. To meet this challenge is to ensure the future of Concordia as a vital force in Higher Education for the Anglophone community in Quebec. The Council

of Universities is quite clear when it deals with Concordia's specific problems and priorities for the next few years:

> "Compte tenu de la nécessité de régler le problème financier à court terme, le Conseil propose à l'Université Concordia de se reconnaître deux priorités pour son développement: la structuration de l'université, et la prudence dans le développement des études de 2e et 3e cycles."
>
> "...Les différentes mesures prises par l'université (création de facultés uniques, de groupes et d'organismes de coordination) n'apparaissent pas suffisantes ou sont insuffisamment explicitées pour que le Conseil se satisfasse du présent équilibre entre les deux constituantes de Concordia. On attend de cette université un plan académique et physique d'intégration à long terme menant à la constitution d'une université qui,même si elle continue d'occuper plusieurs édificies (sic), jouisse d'une organisation académique et administrative unifiée à tous les niveaux."
>
> "En outre, il incombe à Concordia d'être plus innovatrice que sa prestigieuse voisine, celle-ci occupant déjà la plupart des champs traditionnels de l'activité universitaire et la population anglophone de Montréal n'étant pas assez nombreuse pour alimenter deux universités de grande taille dont les activités seraient identiques."
>
> (pp. 288-289)

The challenge is clear. In this time of declining student enrolment, the University must decide how it intends to deal with the future, and where it feels it can best respond to the needs of the Anglophone community which it is expected to serve. It is all the more clear that a combined Faculty of Arts and Science would be most conducive to pedagogical innovation and institutional unity.

I) This section of the Bordan Report deals with an Obiter Dictum. It was stated at the very beginning that it is illogical to talk about the future of Science without implicating the future of Arts. The creation of the proposed Faculty of Arts and Science can be seen as but a temporary step to a general solution for all of Arts and Science at Concordia - and that

would be a University Faculty of Arts and Science. Indeed, to ignore this eventual solution is both impractical and unrealistic. The arguments which logically and philosophically lead to a Loyola Faculty of Arts and University Science for the moment, demand that a Concordia Faculty of Arts and Science be established in the very near future. To decide on the future of Science is to decide implicitly on the future of Arts, though it may be true that the consequences would not materialize before the next two or three years. Considering, however, that Concordia must make clear its intention in the sphere of Arts and Science, we prefer that the implicit be made explicit from the very beginning in order that the ultimate goals and objectives of the University be clear to the community within and without Concordia. Our image in the public eye must be made clear, large and distinctive. Consequently, it is recommended that Recommendation 18 be revised to read as follows:

Rec.: Given the existence of a "Loyola Faculty of Arts and University Science," and given the existence of duplicate Arts Departments, that the Rector give immediate consideration to forming a University Faculty of Arts and Science and that consequently, a Search Committee be struck to appoint a person from the exterior as Dean of the University Faculty of Arts and Science.

Recommendations of the Bordan Report

Recommendations of the Loyola Faculty of Arts and Science

1. *That the SGW Departments of Biological Sciences, Chemistry, Geology, Mathematics, and Physics be joined with the Loyola Departments of Biology, Chemistry, Geology, Mathematics and Physics, to form a single set of University Departments.*

1. Idem

2. *That for each of the departments so established an Advisory Committee be struck, to recommend on the appointment of a Chairman for a term of three years.*

2. That for each Department so established a Search Committee be struck, to recommend on the appointment of a Chairman for a term of three years.

3. *That for this occasion each Committee be made up of two Loyola and two Sir George full-time faculty members from the discipline concerned, and one student from each campus, with its chairman appointed by the Vice-Rector, Academic.*

3. That for this occasion, each Search Committee be constituted as follows:
   a) the Dean of the Sir George Williams Faculty of Science;
   b) the Dean of the Loyola Faculty of Arts and Science;
   c) two full-time faculty members of the Sir George Williams Faculty of Science from outside the Department, to be elected by the full-time faculty of the department concerned;
   d) two full-time faculty members of the Loyola Faculty of Arts and Science from outside the Department, to be elected by the full-time faculty of the department concerned;
   e) one student from each Department's student association;
   f) the Chairman of the Search Committee is to be elected from among the members and by the members of each Committee.

4. *That each Committee recommend to the Vice-Rector, Academic on the appointment of a Department Chairman from among the full-time members of the merged department.*

4. That the Search Committee recommend to the Vice-Rector Academic on the appointment of the Department Chairman, after due consultation with each member of these same departments.

5. *That no further candidates be accepted to the Ph.D. program in Physics.*

5. That no decision be taken concerning the Ph.D. programmes in Chemistry and Physics until the new Faculty Council has been consulted.

6. *That the Ph.D. program in Chemistry be retained.*

6. That no decision be taken concerning the Ph.D. programmes in Chemistry and Physics until the new Faculty Council has been consulted.

7. *That the overall space assigned to Science be established at 120% of the norm, i.e. reduced to 123,000 sq. ft. That the reduction (of about 26,000 sq. ft.) be primarily on the SGW Campus, where the shortage for the other Faculties is felt most acutely.*

7. That the question of space be reconsidered in the light of the most recent data on space available for the Loyola Faculty of Arts and Science and the Sir George Williams Faculty of Science.

8. *That research and graduate programs in Biology and Chemistry be concentrated in the Hall Building.*

8. That the future of research and graduate programmes only be determined after the University has decided where it intends to invest its future thrust geographically and subsequent to consultation with the new Faculty Council.

9. *That the day undergraduate programs in Geology and Physics be concentrated on the Loyola Campus.*

9. That the future concentration of the day undergraduate programmes in Geology and Physics be determined after the University has decided where it intends to invest its future thrust geographically and subsequent to consultation with the new Faculty Council.

10. *That some evening and service courses in Physics and Geology continue to be available on the SGW campus along with essential, non transferable, specialized research facilities in Physics.*

10. That no action be taken on this recommendation until after the University has decided where it intends to invest its future thrust geographically and subsequent to consultation with the new Faculty Council.

11. *That the graduate and research programs in Physics be moved to the Loyola campus to the extent that, and as soon as, facilities can be organized to that end.*

11. That no action be taken on this recommendation until after the University has decided where it intends to invest its future thrust geographically and subsequent to consultation with the new Faculty Council.

12. *That the merged Department of Mathematics be provided with adequate space for its undergraduate and graduate mission, preferably on the Loyola campus, and within the total assigned space in Rec. 7.*

12. That no action be taken on this recommendation until after the University has decided where it intends to invest its future thrust geographically and subsequent to consultation with the new Faculty Council.

13. *That the Commerce component of the Loyola Computer Science offerings be transferred to the Faculty of Commerce and Administration.*

13. Idem

14. *That the Department of Computer Science in the University Faculty of Engineering be instructed to provide the appropriate range of courses, on the Loyola campus, to students in Arts and in Science.*

14. That the Computer Science Committee at Concordia guarantee the implementation of significant minor programmes and elective courses in Computer Science for students in the Faculty of Arts and Science on the Loyola Campus.

15. *That the members of the faculty of the Loyola Department of Computer Science become members of the Faculty of Commerce and Administration, or of the Department of Computer Science in the Engineering Faculty, as the case may be, in accordance with the primary interest of each of the faculty members concerned.*

15. Idem

16. *(a) That a single University Faculty of Science, with its own Council and Dean be established;*

or

(b) That the Loyola Faculty of Arts and Science, consisting of the current Loyola Departments in Arts and Bio-physical Education, and of the University Departments in Biology, Chemistry, Geology, Mathematics and Physics, be given the responsibility for science on both campuses.

16. That the Loyola Faculty of Arts and Science, consisting of the current Loyola Departments in Arts and Bio-Physical Education, and of the University Departments in Biology, Chemistry, Geology, Mathematics and Physics, be given the responsibility for science on both campuses.

17. *(a) That, should Recommendation 16 (a) be adopted, a Faculty Dean be chosen upon recommendation of a Search Committee, established for this occasion with an equal membership of Loyola and Sir George Williams Science faculty members, and an equal number of students from each campus, and that the Committee be instructed to search*

widely, both inside and outside the University, for a suitable candidate.

(b) That should Recommendation 16 (b) be adopted, the Rector give special consideration to the preceding paragraph.

17. That the Loyola Faculty of Arts and Science, consisting of the current Loyola Departments in Arts and Bio-Physical Education, and of the University Departments in Biology, Chemistry, Geology, Mathematics and Physics, be given the responsibility for science on both Campuses.

18. That the Rector give early consideration to the question raised by the existence of duplicate Arts departments.

18. Given the existence of a "Loyola Faculty of Arts and University Science", and given the existence of duplicate Arts Departments, that the Rector give immediate consideration to forming a University Faculty of Arts and Science and that consequently, a Search Committee be struck to appoint a person from the exterior as Dean of the University Faculty of Arts and Science.

LOYOLA FACULTY OF ARTS AND SCIENCE
SPACE 1975/76 CROSS VERIFICATION OF SPACE ALLOWED

SPACE TYPE			SQUARE FEET
100 Classrooms	Bio Phys.Ed.	Special % of Space Assigned For Lectures	728
200 Labs	Sector 2	2 sq.ft. per contact hour	
	Languages - 1248 contact hours x 2 sq.ft. -	2,496	
	Sector 4		
	Science 9858 contact hours x 4 sq.ft. -	39,432	
	Arts 805 contact hours x 4 sq.ft. -	3,220	
	Sector 7		
	Arts 3770 contact hours x 7 sq.ft. -	26,390	71,538

Confer Quebec University Facilities Survey, Laboratory Instructional Capacity Utilization Autumn 1975 Dated June 1,1976

300 Offices

Full time professors		180
Part time professors-Fractionals etc. 284 ÷ 7	-	41
Support Staff		66
		287
Norm Sq.ft. per room 135 x 287		38,745

Confer: Attached list - Loyola Faculty of Arts and Science Faculty and Support Staff 1975/76

RESEARCH SPACE 0.2 x F.T.E. Faculty x Humidity Level

Arts 0	- 30 sq.ft.	x 17.2	Research Units or	516 sq.ft.
Arts 2	125 " "	x 8.1	" " "	1013 " "
Science 2	30 " "	x 2.3	" " "	69 " "
Arts 4	250 " "	x 2.3	" " "	575 " "
Science 4	300 " "	x 9.3	" " "	2790 " "
Arts 7	325 " "	x 2.5	" " "	812 " "
				5,775
				116,786

LOYOLA FACULTY OF ARTS AND SCIENCE

PRELIMINARY SPACE ANALYSIS ACTUAL VRS ALLOWED FOR 75/76 BY DEPARTMENT

EPARTMENTS	FACULTY F/T	F.T.E.	SUPPORT	75/76 ACTUAL SPACE	75/76 ALLOWED SPACE	(SHORTAGE OVERAGE) DIFFERENCE
IOLOGY	10	11.1	7	14,400	16,800	(2,400)
HEMISTRY	11	11.9	6	14,600	9,200	5,400
EOLOGY	4	4.1	1	5,600	3,300	2,300
ATH	10	13.7	1	1,800 *	2,100	(300)
HYSICS	7	7.0	2	7,500	3,900	3,600
UB TOTAL	42		17	43,900	35,300	8,600
ENERAL INC.DEAN			13	2,500	2,000	500
	42	47.8	30	46,400	37,300	9,100
IO PHYS.ED.	5	6.3	2	5,000	8,300	(3,300)
OMPUTER SCIENCE	7	11.6	1	1,100 *	10,400	(9,300)
Excludes classroom space transferred to the Registrar						
	54	65.7	33	52,500	56,000	(3,500)
NGLISH	15	18.3	2	3,600 *	3,000	600
RENCH	13	17.9	2	3,800 *	3,600	200
SYCHOLOGY	11	12.6	2	4,700	5,600	(900)
OMMUNICATION ARTS	14	14.0	9	15,500	31,900	(16,400)
EALTH EDUCATION	-	2.7	4	1,200	1,300	(100)
IBRARY SCIENCE	-	2.1	4	700 *	700	-
OCIOLOGY	12	14.0	1	1,900 *	2,000	(100)
CONOMICS	11	13.1	1	1,500 *	2,400	(900)
ODERN LANG.	6	10.0	1	1,200 *	2,600	(1,400)
LASSICS	5	5.1	1	850 *	850	-
OLITICAL SCIENCE	9	10.1	1	1,200 *	1,600	(400)
.D.S.	-	1.0	1	600	300	300
ISTORY	11	12.3	1	1,900 *	1,800	100
HEOLOGY	8	8.7	1	1,700 *	1,500	200
HILOSOPHY	11	11.1	1	1,800 *	1,700	100
	180	218.7	65	94,650	116,850	(22,200)

NDRAGOGY NOT INCLUDED

LOYOLA FACULTY OF ARTS AND SCIENCE
FACULTY AND SUPPORT STAFF
1975-76 ACADEMIC YEAR

DEPARTMENT	FULL TIME PROFESSORS	PART TIME PROFESSORS	SUPPORT STAFF	TOTAL
BIOLOGY	10	8	7	25
BIO-PHYS. ED.	5	9	2	16
CHEMISTRY	11	6	6	23
CLASSICS	5	1	1	7
COMMUNICATION ARTS	14	-	9	23
COMPUTER SCIENCE	7	32	1	40
ECONOMICS	11	15	1	27
ENGLISH	15	23	2	40
FRENCH	13	34	2	49
GEOLOGY	4	1	1	6
HISTORY	11	9	1	21
MATHEMATICS	10	26	1	37
MODERN LANGUAGES	6	28	1	35
PHILOSOPHY	11	1	1	13
PHYSICS	7	-	2	9
POLITICAL SCIENCE	9	8	1	18
PSYCHOLOGY	11	10 (1)	2	24
SOCIOLOGY	12	14	1	27
THEOLOGY	8	5	1	14
I.D.S.		(3)	1	4
ANDRAGOGY		5	1	6
GEOGRAPHY		9 (2)		11
HEALTH EDUCATION		19	4	23
LIBRARY SCIENCE		15	4	19
DEAN			13	13
TOTAL	180	284	66	530

÷ 7

** FIGURES IN BRACKETS INDICATE FRACTIONAL APPOINTMENTS
** FULL TIME FIGURES INCLUDE ALL PROFESSORS ON SALARY OR NON SALARY LEAVE

CONCORDIA UNIVERSITY

SPACE NORMS

The following represents the approach used in determining our allowable space versus our actual space.

2.1. Classroom space:

The following table is applied to the total allowable lecture contact hours, derived as described in section 1.3 to calculate the total classroom space allowed.

First	10,000	contact-hours x 1.6	sq.ft./c.h.
Second	10,000	" " x 1.3	" " "
Third	10,000	" " x 1.1	" " "
Fourth	10,000	" " x 1.0	" " "
Next	40,000	" " x 0.9	" " "
Remainder		x 0.8	" " "

Since classroom space falls under the jurisdiction of the Registrar, no sub-division is necessary. The number and sizes of classrooms which will best suit class size patterns at Sir George is currently under study.

2.2 Teaching Laboratory Space:

Total laboratory space = Total allowable lab contact hours x 5 sq.ft./c.h.

Lab space is sub-divided among groups by weighting the total contact hours for each group according to its humidity level. This weighted total is then expressed as a fraction of the total weighted contact hours for the institution. The fraction thus obtained is multiplied by the total lab space to give the group's share*.

2.3 Office Space:

135 sq.ft. for each F.T.E. employee is allowed. In addition, a quarter of graduate students are included in the calculation. A further addition of 12.65 sq.ft. per F.T.E. graduate student has been made to allow office space for teaching assistants. Ancillary Enterprises or service staff to be excluded from staff calculations.

± Part-time faculty calculated by dividing average full-time faculty salary into total part-time salaries. Approximate ratio 6.8 to 1.

* It now appears that independent calculations can be made for each humidity level rather than calculating the overall allowance and prorating it as indicated. The appropriate changes have been incorporated in the attached calculations.

± Revised April, 1976

...../2

2.4 Research Space:

The allowance is 200 sq.ft. per researcher unit, calculated as follows:

Researcher units = 0.2 x F.T.E. Faculty + 0.25 x F.T.E. Graduate + F.T.E. Researchers.

A number of methods for sub-dividing the total research space among the groups have been tried. The most favoured approach at present is to assign weights to the research staff for each group in accordance with the relative needs of each group for research space. The weights tentatively chosen are given in Table 4.

2.5 Library Space: Total F.T.E. Students x 13.3 sq.ft.

This figure covers stack space, reading rooms and technical operations. The norm makes no provision for growth, stack space being limited to 5 sq.ft. (75 volumes) per F.T.E. student. To properly serve a university community however, it is proposed that sufficient stack space be built in initially to allow for 10 years growth at a rate of 0.33 sq.ft. (5 volumes) per year per F.T.E. student. Additional space could, if necessary, be converted to library use at a later date.

2.6 Museum Space: Total F.T.E. Students x 2.4 sq.ft.

2.7 Physical Education (Temporary Formula): Total F.T.E. Students x 7.0 sq.ft.

2.8 Residences: Norms not applicable here.

± 2.9	Food Services, Student & Staff Services: F.T.E. x 15 sq.ft.	Revised to:	12.1	
	2.8.1 Cafeterias: F.T.E. Students x 5 sq.ft.	"	"	4.05
2.10	2.10.1 Lounges: F.T.E. Students x 7 sq.ft.	"	"	5.67
	2.10.2 Lockers & Cloakrooms: F.T.E. Students x 2.sq.ft.	"	"	1.62
	2.10.3 Community Services (Health, Placement, Guidance, etc.) F.T.E. Students x 1 sq.ft.	"	"	.81
				12.1

2.11 Communications Space: F.T.E. Students x 5.2 sq.ft.

2.12 Maintenance Services: 3.2% of total (2.1-2.11)

± Revised April, 1976

Chapitre 13

CADRE GENERAL D'ANALYSE

1. Une démarche itérative

Le Conseil des universités est un organisme strictement consultatif; il propose au ministre de l'Education les voies qui lui semblent les meilleures pour le développement de l'enseignement supérieur. Ainsi, dans le cas de la définition d'orientations pour l'enseignement supérieur québécois, il soumet au ministre de l'Education et aux parties intéressées les choix qui lui paraissent susceptibles de favoriser un développement coordonné de l'enseignement supérieur. Cette démarche du Conseil est d'ailleurs tout à fait conforme à sa loi constitutive qui prévoit que "le Conseil peut, en particulier, proposer les objectifs qui doivent être poursuivis, à court et à long terme, pour que soit assuré le développement de l'enseignement et réviser périodiquement ces objectifs"(1). Le Conseil a donc choisi, pour répondre à cet aspect de son mandat, la formule de rapports itératifs portant sur les objectifs de l'enseignement supérieur et sur les orientations des établissements.

Il a par ailleurs tenu à impliquer directement les universités dans ce travail de planification indicative, leur participation lui ayant toujours paru essentielle. En fait, on peut dire que les universités sont elles-mêmes les initiatrices de cette partie du rapport présenté par le Conseil; celui-ci ne fait que reconnaître, compte tenu des besoins et ressources de l'ensemble du réseau, les axes et orientations que les universités se sont elles-mêmes définies en accord avec leur personnalité propre.

---

(1) Loi du Conseil des universités, article 3, b).

Le Rapport sur les objectifs généraux de l'enseignement supérieur et les grandes orientations des établissements (février 1973) a été généralement bien reçu dans les différents milieux de l'enseignement supérieur québécois; déjà, dans ce premier rapport, on indiquait l'intention de faire de la définition des orientations une opération itérative. L'accueil accordé à ce rapport a incité le Conseil à poursuivre son action. Il est bien conscient que c'est grâce au travail effectué dans les universités qu'il peut maintenant franchir une nouvelle étape.

2. Les mémoires reçus

A l'exception de l'Université de Sherbrooke dont le mémoire, pour des raisons particulières, n'a porté que sur l'évolution de l'éducation permanente, tous les établissements d'enseignement supérieur ont soumis au Conseil des universités un mémoire sur leur évolution générale depuis la parution du Cahier III du Rapport sur les grandes orientations des établissements.

Dans leurs mémoires, les universités ont fait état de leur évolution depuis les trois dernières années. Elles ont particulièrement voulu tracer avec plus de précision la personnalité qu'elles se sont forgée avec le temps. Elles ont en outre fait le point sur la façon dont elles ont assumé les orientations et les axes que leur a reconnus le Conseil des universités. Enfin, certaines ont voulu suggérer des remaniements à ces axes ou orientations, des ajouts, des corrections. Pour le Conseil, les modifications proposées par les universités sont importantes, car il a toujours laissé entendre clairement que les orientations retenues ne l'étaient pas nécessairement une fois pour toutes. Comme les universités, le Conseil entend donc, dans cette section, faire le point, revoir ses choix, fixer de nouvelles priorités s'il le faut et tracer un nouveau portrait instantané d'une situation qu'il sait dynamique et changeante.

3. Définition des principaux concepts

Le Conseil des universités, d'accord en cela avec certaines universités, croit maintenant qu'il serait utile de reprendre la définition des principaux concepts qui ont servi lors de la rédaction du Cahier III afin, du moins pour certains d'entre eux, de les clarifier.

Ces principaux concepts sont ceux de mission, d'orientation, d'axe, de priorité et de secteur modèle.

3.1 La mission

En définissant la mission de chaque université, le Conseil entend préciser le rôle global que chaque université est appelée à jouer dans le réseau des établissements d'enseignement supérieur québécois. Ce rôle est défini à partir des caractéristiques institutionnelles, reflète la personnalité de l'institution et tient compte du contexte où celle-ci se trouve. La mission d'une université fait plus particulièrement ressortir ce qui fait son originalité et ce qui la distingue plus ou moins nettement des autres établissements du réseau. Selon le type de mission qui est la leur, les établissements assument différemment les fonctions communes aux universités (enseignement, recherche, service à la société), les priorités fixées à l'enseignement, l'éducation permanente comprise comme "principe intégrateur" de l'enseignement supérieur.

3.2 Les orientations

Les orientations sont liées à la mission et aux axes d'un établissement. Elles constituent les lignes de force du développement de l'établissement (axes, secteurs modèles, priorités) et tien-

nent compte des principales caractéristiques institutionnelles définies pour chacun (étudiants, éventail de programmes, niveau des études, recherche, aire desservie et population-cible).

3.3 Les axes de développement

En 1972, lorsqu'il a amorcé ses travaux de planification de l'enseignement supérieur, le Conseil, dans un premier temps, a demandé à chaque université de se définir des axes de développement, c'est-à-dire de regrouper et d'intégrer les activités qui lui étaient les plus chères, celles qu'elle tenait à conserver à un haut niveau de qualité ou à développer de façon privilégiée. L'objectif du Conseil était d'amorcer la planification du réseau d'enseignement supérieur, en s'appuyant sur les universités elles-mêmes et sur la perception qu'elles avaient de leur propre développement. C'était du même coup inviter les universités à planifier leur propre développement institutionnel. Dans un deuxième temps, le Conseil s'est prononcé sur les axes choisis par les universités. Se situant dans une perspective de réseau, il a accepté certains axes, parfois conditionnellement, en a refusé d'autres et a même fait des suggestions de nouveaux axes dans certains cas.

L'Université du Québec a défini correctement ce que le Conseil entend par axe de développement (1): un domaine privilégié d'intervention regroupant des activités d'enseignement et de recherche concernant un des secteurs disciplinaires ou interdisciplinaires, ou encore concernant un champ d'application des connaissances. La définition d'axe véhicule l'idée du développement prioritaire et complet des activités qui y sont rattachées. Quant aux autres champs, c'est-à-dire ceux qui ne sont pas rattachés à un axe, soit à cause du manque d'ampleur des activités ou des ressources nécessaires, soit

---

(1) Université du Québec, Opération grandes orientations, Cahier II, p. 22. avril 1975.

à cause d'une priorité non aussi formelle au plan du réseau, le développement n'est pas exclu, soit comme support à un axe, soit pour répondre aux besoins généraux que doit satisfaire l'établissement. Il faut donc rappeler ici que chaque université peut constituer sa propre programmation et ses propres axes d'activités; le Conseil retient parmi ceux-ci les axes qui comportent une signification particulière pour le développement du réseau en tant que réseau.

Pour opérationaliser davantage sa démarche, le Conseil croit utile d'apporter les précisions suivantes:

Axe accepté: en acceptant un axe de développement institutionnel, le Conseil entend reconnaître à l'établissement en cause une responsabilité particulière à l'échelle du réseau en raison de la qualité de ses activités, de leur importance et de leur degré d'intégration. La reconnaissance d'intervention jointe à la qualité des activités peut justifier l'acceptation d'un axe, mais cette acceptation n'implique pas nécessairement monopole.

Axe retenu en principe: en acceptant en principe un axe de développement, le Conseil reconnaît les potentialités de l'institution dans le secteur concerné et la contribution qu'elle peut apporter à l'échelle du réseau, mais il juge que la définition de l'axe reste encore trop imprécise sous certains aspects pour que la reconnaissance soit davantage officialisée.

Axe refusé: le refus d'un axe signifie que le Conseil ne peut reconnaître à l'institution une responsabilité particulière à l'échelle du réseau dans le secteur en cause, soit que la qualité des activités, leur importance ou leur degré d'intégration n'apparaissent pas suffisants. Une institution garde tout à fait le loisir de développer les activités que regroupe un axe non accepté, mais elle devra généralement le faire dans le cadre de sa planification interne et par réaménagement de ses propres ressources.

3.4 Les priorités

Les priorités sont comprises comme étant des problèmes importants auxquels l'université doit faire face à court ou à moyen terme. Les priorités peuvent également être liées à des secteurs d'activités qui devraient correspondre à la mission qui a été reconnue à l'université et qui présentement seraient inexistants ou peu développés.

3.5 Les secteurs modèles

Ces derniers, du moins si l'on s'en tient aux mémoires reçus des universités, n'ont pas eu un impact très grand sur l'enseignement supérieur. Nous les retenons toutefois, convaincus de la richesse du concept et de la possibilité de son application. Généralement, le Conseil limite son application aux seuls établissements qui ont annoncé leur intention de se voir reconnaître un tel secteur. Un secteur modèle s'entend d'une activité originale, dont le Conseil encourage l'expérimentation par une université, avec l'espoir qu'elle puisse être généralisée et profiter à l'ensemble du réseau.

Le Conseil, comme il l'a fait dans le Cahier III, insiste sur le caractère dynamique des orientations et des axes. Toutefois, il faut être conscient que la définition de missions, d'orientations et d'axes aura une influence sur la planification de l'enseignement supérieur pour les deux ou trois années à venir. Les universités ont accepté de participer aux travaux menés par le Conseil, et elles sont, en grande partie, les maîtres d'oeuvre de ce rapport. Nous croyons que la démarche poursuivie, peut-être aussi importante, sinon plus importante que le produit final, permet suffisamment de sécurité pour autoriser le Conseil et les organismes de planification à utiliser de façon large les conclusions qui apparaissent au présent rapport.

La définition d'orientations et d'axes se veut une opération récurrente. Il ne s'agit donc pas de choix définitifs. Ils constituent néanmoins une source de référence importante à court et à moyen termes.

4. Schéma de la présentation des établissements

La troisième partie de ce rapport d'étape intéresse directement chaque établissement d'enseignement supérieur. Au printemps 1975, les universités ont répondu, par la présentation d'un mémoire, aux diverses questions qui leur avaient été posées par le Conseil des universités. Certaines des questions posées ont été traitées dans les parties précédentes; la dernière partie de ce rapport veut s'intéresser particulièrement à la définition de la personnalité de chaque établissement et préciser la place de chacun dans le réseau.

Un chapitre est réservé à chaque établissement. On tente de dégager la personnalité de chacun à partir du cadre général de présentation suivant:

1- La perception qu'a l'établissement de ce qui la caractérise

2- Les caractéristiques de l'établissement aux plans suivants:

- population étudiante
- éventail des programmes
- niveaux des études
- recherche
- aire desservie et population-cible

3- La mission de l'établissement

4- Les orientations et les axes de l'établissement

5- Les secteurs modèles de l'établissement

6- Les problèmes spécifiques et les priorités de l'établissement pour les prochaines années

APPENDIX C

excerpt from a memo to Dean R. Breen, from Dr. G. Dewey, Chairman of the Sociology Department, dated September 20, 1976.

".....it is generally conceded by scholars that traditional science disciplines are rooted in epistemological considerations concerning the nature of reality and how it may be apprehended, while traditional arts disciplines are amenable to scientific reflection. Innovation, therefore, requires modes of approach which emphasize the ambiguity inherent in intellectual disciplines - whether located in Arts or Science - and the separation of the two areas would structurally arrest the process of innovation..."